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## Ganged Mowers Clean Pond Banks

Logan Hurst can get close to his pond's edge without fear of sliding in with his offset ganged mowers. Initially, he ganged three Troy-Bilt 21-in. push mowers for his dad to use behind an old Cub Cadet.

"I built a frame out of steel tubing and angle iron to hold them in position and mounted four caster wheels to it," says Hurst. "One problem I ran into when trying the gang out was that if in a row, the discharge from the first went into the second and then both of them went into the third. This overloaded it."

Hurst slightly offset the three to stagger the discharge and also closed the mulching flaps.

"My grandfather was still living at the time, and he added a piece of wood to the plastic housing at the rear of the mowers to deflect the clippings down," says Hurst. "My dad mowed with it a few times, but a

bad hip ended that."

The mower gang sat unused for a few years until Hurst had the idea to use it on the sides of his pond. He'd been using a string trimmer, but that was time-consuming. He first pulled the mowers with an ATV before deciding to adapt them for his tractor.

"I'd seen versions online that used hydraulics and figured I could use an arm on the back of the tractor to raise and lower them," says Hurst. "I took a look at what spare steel I had lying around. I had some 2 by 4-in. rectangular steel that I could use for the arm."

He fabricated a heavy-duty frame for his 3-pt. hitch, with a pivot point at one end. A 2 by 2-in. rectangular steel arm extends from the pivot point to the mower gang frame. A vertical arm on the mower arm at the pivot point served as a lift lever.

Originally, Hurst planned to use a cable

on a hand crank on the frame end opposite the gang to raise and lower the mowers. He quickly discovered the gang was too heavy as he stripped the winch. The solution was to position a hydraulic cylinder opposite the mower gang. It activates a vertical arm that pivots on the 3-pt. frame. A chain running from it to the vertical on the mower arm lifts and lowers the mowers.

He made one test run, and after some minor adjustments, it worked. He replaced the original low-cost caster wheels with heavy-duty wheels to handle bouncing around. He also discovered that even on his 75-hp tractor, the weight of the mowers and frame was too much. Hanging rectangular weights from a home gym as counterweights at the cylinder end of the frame was enough.

"It's not a Bush Hog, but it functions for regular maintenance," says Hurst. "The chain and the 3-pt. arms let me float the mower gang at the right height for clipping the grass and weeds. If they've gotten too high, I can make a pass, back up and make another pass."

For Hurst, fabricating the pond bank mower is about more than simple maintenance. His



Hurst slightly offset the three mowers to stagger the discharge.

dad paid around \$150 for the push mowers and also bought the first set of wheels. Hurst estimates that he spent about \$200 on the hydraulic cylinder and welding rod. The rest was scrap.

"Throwing together things that are just sitting around and making something that works is really nice," says Hurst.

Hurst shares his passion for making things that work on his YouTube channel. Visit it for detailed videos on ganging the mowers and adapting them to use on his tractor. Join his 2,000 subscribers and watch over 300 videos.

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2022 USDA study showed that about 50% of the U.S. corn crop was planted using autosteer. Luck notes that many more farmers might have had the capability.

## Trimmer Add-On Streamlines Lawn Mowing

The PAL DMT16 Mowing Attachment with Trimmer Technology allows you to "trim as you mow" without the trouble of managing an extra engine. It enables you to trim around, under, between and along obstacles in the path without having to leave the riding mower.

"The DMT mounts right on the mower's deck," says company owner Norm Nicol. "Instead of being battery-powered, it stacks on the mower's existing pulley. The trimmer is built with its own wheels, so it carries its own weight. Your leg won't get tired from supporting it."

Since most mowers operate at 20 to 30 hp, the weedeater matches this power level rather than the typical 1 hp.

"It's a weedeater on steroids. We tell our customers to be careful around small trees."

The PAL's mounting brackets are designed to handle the mower's stress points and prevent damage to the deck. Installation requires drilling four holes for proper mounting, but no torch or welder is needed. Nicol estimates that the average customer needs about 45 min. for installation. An installation video on the company website breaks down each step.

After the initial installation, the trimmer can be removed in minutes without causing structural damage to the mower. It's also possible to use the same base unit on different mowers, although switching between brands might require a different mounting bracket.

"At 62 lbs., the trimmer is about three times heavier than anything else on the mower," Nicol says. "It's built like a piece of farm equipment. Our customers say it easily outlasts 30 normal weed eaters. We've had customers who wear out commercial mowers after three years, take them off to reinstall on their new mower three times over. That's a



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10-year lifespan at least."

He shares that the trimmer's biggest fans include cemetery groundskeepers, solar panel farmers, horse owners and anyone with plenty of electric fencing.

"Everyone can agree that weed eating while sitting on a mower is much more enjoyable."

While use intensity can vary by terrain, customers can expect one to five hours of use before needing to change the trimmer line. This line comes pre-cut and packed in a 5-lb. box for easy installation.

Potential customers can request a quote online for complete pricing information.

Contact: FARM SHOW Followup, PAL Mowing System, 1700 Grandview Ave., Suite B, Muscatine, Iowa 52761 (ph 319-627-6624; info@noahmowingsystem.com; www.palmowingsystem.com).

## Precision Tech For Older Farm Equipment

As equipment ages, farmers miss out on the advantages of new technological advances and innovations.

The farm equipment industry has begun offering ways to upgrade older equipment with modern precision ag capabilities.

Features such as auto-steering, automatic shut-offs for sprayers and planters, and end-row turn automation boost efficiency and could make sense for many farmers' return on investment.

Joe Luck, associate director for the Eastern Nebraska Research, Extension and Education Center, says it's hard to give blanket recommendations because every farm and situation is different, but farm management is all about optimizing inputs.

A 2022 USDA study showed that about 50% of the U.S. corn crop was planted using autosteer. Luck notes that many more farmers might have had the capability.

"Autosteer is embedded in everything and is often a simple activation," he says. "Some companies have even developed row sensing, which is good for running down mature corn rows."

Adding these types of features to older tractors could be as simple as triggering a subscription. Logistics support can also be

added. Tools like JD Link can manage multiple machines.

Planter upgrades include section controls, electric drives, and metering systems for downforce tools. Sprayer additions also include row or section cutoffs or a weed-targeting system.

Farmers must consider several factors, including the potential need for more power to operate these systems, entry costs, the availability of software upgrades for their specific needs, and the level of dealer support.

When evaluating new technology, it's important to determine how many acres the equipment will cover, since the total can quickly add up for tractors used in planting, fertilizing, spraying, cutting hay and harvesting. Farmers need to consider how the upgrades will fit with their specific operation.

Upgrading older farm equipment with new technology is a smart way for farmers to leverage their existing assets. It can improve efficiency and save money without needing to buy new machines.

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